

PART TWO

OBTAINING AND RECORDING INFORMATION AND TESTIMONIAL EVIDENCE

CHAPTER 3

Notes, Photographs, and Sketches

Notes, photographs, and sketches are made of the crime scene and of the actions taken during the crime scene search and throughout the investigation. They are an essential part of the investigative process. They help you accurately recall events and identify evidence in court. They serve as valuable references of details uncovered during the search. And they form a detailed record attesting to the thoroughness of the process. Sketches, photographs, and notes made during an investigation become Department of the

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Army property; they are not kept or used as personal property.

NOTES

Notes are your most personal and readily available record of the crime scene and of your investigative process. No rule exists concerning the detail the notes should reflect. Your objective should always be to make notes that will be fully meaningful months after the event. Remember that a note that is clear to you a short time after it is written may be unintelligible later. Do not expect to rely on your memory of associated events to give single word notes their full meaning.

Note making should begin with your assignment to the case and continue through the completion of the investigation. Supplement your notes with photographs, sketches, and scale drawings. Record your notes in the order that you receive information, take actions, and make observations. The sequence of your notes should be logical and systematic.

Your notes aid in the accurate recall of events for testimony in court and they furnish raw material for your written report on the case. Your formal written report may not need the level of detail or items of

information that are needed for your testimony. The details you record in your notes should anticipate both the needs of the written report and the questions you may be called on to answer for attorneys or members of a court.

The type of notebook you use, which may seem to be a minor point, can be important. Unless a separate notebook is to be used for each case, a looseleaf notebook is better than a bound notebook. Your notebook may be examined in court. If notes from several cases are included in the same book, there is a chance of unauthorized disclosure of information on matters not being dealt with in the case being heard. If a looseleaf notebook is used, the pages on other cases can be removed. Unauthorized disclosure of facts related to other cases is thereby avoided.

In major cases with a lot of physical material and a large crime scene, you may want to use a portable tape recorder. By taping your observations and findings, you can include more details in your notes. In all cases, the tapes should be transcribed into a written record that you may carry into court.

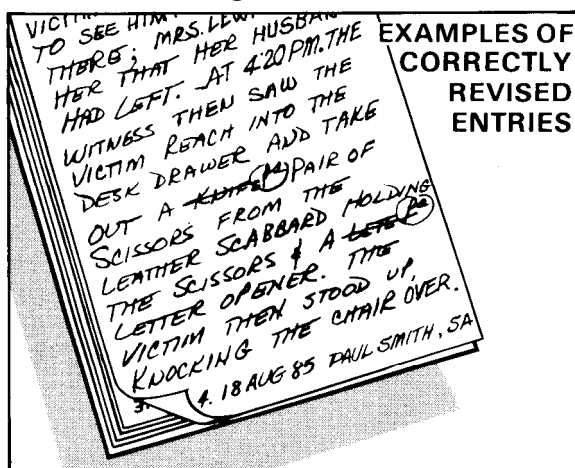
Keep your notes in a safe place with the local office case file. Even after a criminal has been convicted and sent to prison there is always a chance that an appeal or other civil action will require your appearance in court again.

Print your notes if your handwriting is not easy to read. Use blue or black ink that will not smudge easily. Number each page of notes and identify it with your name, your title or rank, the case number (when known), and the current date. Also record the times when an action is taken, when information is received, and when an event is observed. *Do not edit or erase your notes.* If you make a mistake, line out the entry, initial it, and then write the correct information.

Your notes should include a detailed description of the scene and any item you think pertinent to the case. Your description should be as complete as you can make it. See Chapter 4 for discussion of how to develop descriptions.

Record the exact location, giving measurements and triangulation of evidence, where the item was found. See Locating

Evidence on Sketches later in this chapter. Cite the relative distances separating various items. State the techniques used to collect the evidence and to record identifying marks placed on the item or the package in which the evidence was placed. Be sure to tell what techniques were used to provide crime scene security and to search the scene. And include any actions you take that may have a bearing on the evidence you obtain or significantly affect the investigation.



PHOTOGRAPHS

A picture may or may not be worth a thousand words. But it is certain that photography is a valuable aid in criminal investigations. Useful photographs can be made without great expertise.

Crime scene and evidence photographs are simply the photographs made to supplement notes and sketches or to clarify a point relative to a case. They are also made to identify personnel and to form a permanent record of fragile or perishable evidence. Time is an essential factor. *Objects must not be moved or examined with thoroughness until they have been photographed from all necessary angles.* There are situations in which the object of interest undergoes significant change with the passage of time. Thus, photographic equipment must be kept in a constant state of readiness.

Photographs are admissible in court if you can testify that they accurately depict the area observed. The accuracy of a photograph

relates to the degree it represents the appearance of the subject matter as to form; tone; color, if applicable; and scale. A lens that will accurately record objects and areas in focus may not correctly portray distances between objects nor show objects out of focal range in their proper perspective. In such situations your crime scene sketch and your notes will play strong supporting roles.

Providing a photograph's negative is usually enough proof to refute an allegation that a photograph has been altered. However, if enlarged photographs are made for presentation in court, a contact print without borders should also be made. Because scale, distances, and perspective are important in interpreting photographs taken at crime scenes, include a ruler or other scale measure in such a photograph when you can. As some courts may not allow even this minor modification to the scene, you also should take an identical photograph without the scale indicator.

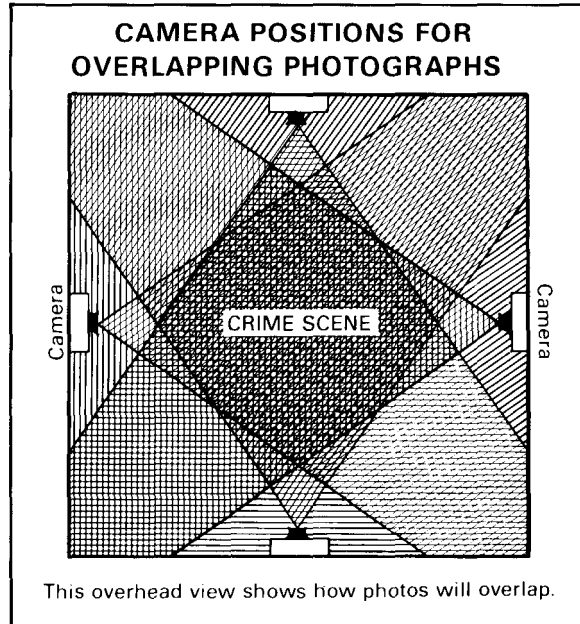
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A photograph, to be high-quality evidence, must depict the scene, persons, and objects precisely as they were found. Photography is an exclusive action in the crime scene search. No people may be working within the scene at the time it is photographed. And extraneous objects, like police and investigative equipment, are excluded from the photos.

Record the technical data for each photograph in your notes. Each photograph must be precisely identified. This data becomes part of the permanent record of the case. A good way to do this is to create a photo log. Assign each photo a number. Tell what each photo depicts. Cite the time the photo was taken, the type of photo, and the distance to the focal point. Tell what camera was used and at what height it was held. Give the position of the camera or angle of the camera shot. Say what lens was used, if flash was used or film reloaded, and describe any photo overlays. In addition to recording identifying data in your notes, you must do so on a photography sketch.

All camera positions and distances to the focus point must be recorded on the crime scene photograph, sketch. You can do this by measuring from a point on the ground directly below the camera lens to an immovable object used as the focus point for the picture. In making crime scene

photographs, it is best to keep the camera at about eye level. *If an explosive was used at a crime scene and there is residue of the explosive present, do not use a flash attachment.* Use a tripod or raise or lower the camera height to get the object to be photographed in proper focus. Take overlapping photographs of interior scenes intended to depict an area as a whole, moving in one direction around the room or area.



| SAMPLE PHOTO LOG | | | | | |
|--|-------|----------------------------------|--|----------------------------------|-------------------------|
| SA <u>TIM C. WINKLER</u> | | | | Report Number <u>063-85-4807</u> | |
| TIME <u>0904</u> Began taking crime scene photographs and drawing rough sketch to depict camera positions and distances. All photographs taken at eye level height (5' 6") unless otherwise indicated. All interior and exterior photographs are taken with the following equipment: | | | | Date <u>25 NOVEMBER 1985</u> | |
| TYPE CAMERA <u>CANON AE-1</u> | | BODY NUMBER <u>603113</u> | | | |
| LENS FOCAL LENGTH AND LENS SERIAL NUMBER <u>50mm 1:1.4</u> | | <u>10492</u> | | | |
| TYPE OF FILM <u>EKTACHROME</u> | | NUMBER OF EXPOSURES <u>36</u> | | | |
| ASA <u>400</u> | | FILTRATION <u>CANON HAZE</u> | | | |
| F/STOP <u>SEE REMARKS</u> | | SHUTTER SPEED <u>SEE REMARKS</u> | | | |
| FLASH ATTACHMENT <u>NA</u> | | FLASH SERIAL NUMBER <u>NA</u> | | | |
| EXPLANATION OF TERMS USED IN REMARKS COLUMN: Camera held in horizontal format, unless otherwise noted. DA-Photograph taken from directly above the object; V-Camera held in vertical format; N-Normal lens; M-Macro lens; WA-Wide angle lens. | | | | | |
| TIME | PHOTO | TYPE PHOTO | DEPICTING | DISTANCE | REMARKS |
| 0910 | # 1 | OUTSIDE ESTABLISHMENT | DISTANCE TO BUILDING # 3252-A FROM WALKWAY | 14' 7" | N, 1/500 SEC, F/11 |
| 0913 | # 2 | OUTSIDE ENTRANCE | OPEN DOOR TO APARTMENT 126-A | 6' 9" | V, N, 1/500 SEC, F/8 |
| 0918 | # 3 | EVIDENCE | PISTOL ON THE FLOOR IN THE DOORWAY | 2' 6" | DA, N, 1/250 SEC, F/5.6 |

The most important element in investigative photography is maintaining perspective. Photographs must reproduce, with the same impression of relative position and size of visible objects, the scene as it would appear to someone standing in the photographer's shoes. Any significant distortion in the perspective will reduce, or destroy altogether, the photo's evidence value. The best way to maintain natural perspective is to aim the camera so a 90-degree angle is formed by opposing walls. If outdoors, use fixed objects like trees to maintain perspective.

The chain of custody of investigative photographs is maintained in the case file. When you send film by mail to a commercial processor, use registered mail with a return receipt. Keep registered mail receipts and copies of work orders for film processing in the case file.

PHOTOGRAPHING SCENES AND OBJECTS FOR EVIDENCE

The most important rule in crime scene photography is to photograph all evidence or possible evidence before anything is moved or touched. This rule applies to general scenario shots and to closeups of specific items of evidence.

Fingerprints that can be seen without the aid of dusting powder should be photographed up close before dusting. There is always the danger of the print being damaged during the dusting process.

Photographs should be taken of **impressions** of which a cast will be made. Hold the camera directly above the ground and the flash close to the impression at an angle. Use flash at all times. Oblique light will reveal more details. Take the closeup with a ruler near the print, so the proper scale can be determined. Make at least four photographs of each impression. Take a picture from every side, using light from each different direction. This reduces the chance of details being missed in a photograph because of shadows cast by a light source from only one direction. Make sure the date, case number if known, your name, exhibit number if known, type of film used, and camera setting shows in the photo. It should be

written on paper and placed next to the impression.

Photographs of **tool marks** must show the marks and enough of the surface on which the marks are located to identify them positively. Show the mark as it actually appears and in its overall relationship to other objects at the scene. Include an ordinary ruler, along with data identifying the location, situation, and case, in each picture to provide the lab examiner a scale of measurement.

When photographing **burglary, house-breaking, and larceny scenes**, you will want to pay particular attention to the interior and exterior of the building and to damaged areas. Note particularly any damage around the points of entry and exit used by the criminal. Take closeups of damaged containers like safes, wall lockers, or jewel boxes that were the target of the offense. Take both closeup and perspective photos of tool marks. The latter will allow you to note the position of marks with respect to the general scene. And fingerprints and footprints, of particular value in these cases, should be photographed before they are lifted or preserved.

When photographing **an arson scene**, complete coverage of the damage is important. Perhaps of even greater importance are photos of objects or areas suspected to have been the point where the fire began. Make closeup photographs of all such objects or areas.

If the fire is in progress, seek out various angles from which to take photographs. But try to keep out of smoke-filled areas. Your first photographs should be of the entire structure. Use color film to show the color of the smoke, flames and vapors. Take a series of photographs at intervals of several minutes to show the intensity and direction of the fire. Then photograph any spectators. The perpetrator may be present, watching the results of his or her efforts.

When the fire is extinguished, photograph the entire exterior of the structure. Then photograph all affected interior areas and any evidence found. Photograph in detail suspected points of the fire's origin and areas

showing an “alligator” burn pattern. You cannot rely on your exposure meter when trying to photograph charred wood. Instead, use a two- or three-stop overexposure.

Accident scenes should be photographed as soon as possible after the event. Except when photographing vehicles, set your lenses at normal focal length. This will prevent distortion in the relative width of roads, distances between points, and the like. If special lenses are used, note that fact in your record of the search and give a description of the lenses used.

Photograph the overall scene of the accident from both approaches to the point of impact. Capture the exact positions of vehicles, injured and deceased persons, and objects directly connected to the accident. If possible, take photographs of skid marks before the vehicle is moved. Then take photos of the marks after the vehicle is moved. Photograph all points of impact, all marks of impact, and all damage to real property. Be sure you record any pavement obstructions and defects in the roadways. Make closeup photographs of damage to each vehicle. Make at least two for each vehicle. The first should show the front and one side. The second closeup should show the rear and other side of the same vehicle. And, of course, you will want photos of tire tracks, glass, and other associated debris.

Usually, **death scene** photography must be more extensive than that of other crime scenes. This is due to the severity of the offense. Photograph the approaches to the scene and the surrounding areas (the yard of a building in which a death occurs, general area surrounding an outdoor crime scene). Take closeup photographs of the entrance and exit to the scene or of the route most likely to have been used if the entrance and exit are not obvious.

Make general scenario shots showing the location of the body and its position in relation to the room or area in which it was found. And give 360-degree coverage of the room or scene with overlap points clearly identified in the photographs. All evidence must be photographed—shots establishing the evidence in relation to the scene, shots of evidence closeup, and shots of evidence

closeup with a ruler to show perspective and size. After the body is moved and each item of evidence is removed, photograph the area underneath them if there is any mark, stain, additional evidence, or other apparent change. Photograph any “plastic” and contaminated prints before you try to collect them. And photograph developed latent prints prior to lifting. Include shots of areas where prints are discovered if the areas were not included in other photographs. Photograph bloodstains, including their locations, with color film if you can. Black and white pictures should also be taken.

PHOTOGRAPHING HUMANS FOR EVIDENCE

Photographs should be taken of victims or suspects of crimes like assault, aggravated assault, or sex offenses that involve bodily harm. Photographs should be taken of any wound, injuries, stains, or other trace evidence that may be on the person or the person’s clothing. *Written permission* should be obtained from living persons before photographing them. If photographs of a body area that is normally clothed are required, a witness should be present. If the victim or the suspect is a minor, the *written consent* of the parent or guardian is needed. The photography must be done with the consenting person present.

Photographs of parts of the body that usually are not visible when a person is clothed are taken *only* under the direct supervision of the examining physician. It is the physician’s testimony that the photographs are intended to illustrate. Thus, it is unusual if this type of photograph is taken at the crime scene.

The evidence value of a photograph of a deceased person is reduced if you include views that could later be alleged to be deliberately inflammatory. The unneeded exposure of sexual organs is a case in point.

Take at least two full-length photographs of the body at 90-degree angles to each other. Hold the camera as high as possible, pointing downward toward the body. Include at least one closeup photograph of the head and shoulders of the victim. Position the camera for this shot directly above the head and

shoulders of the body. Take as many closeups of the body as needed to show wounds and injuries. When photographing a body that is lying in a horizontal position, hold the camera directly over the victim's head and shoulders. Do this at a height of no less than 5 feet. Closeup photographs of injured parts of the body are most effective in color. But black and white pictures should also be taken.

The presence of wounds, blood, or other discolorations on the corpse may affect

identification. Using a lens filter to create more lifelike tones may aid identification.

Photographs of the body should also be taken during the autopsy. Cooperate with the pathologist to obtain these. Your photos should include full-length views before and after undressing and/or washing. Photograph identifying marks and closeups of all wounds with and without a measuring device. Both color and black and white photos should be taken.

SKETCHES

Properly prepared sketches may be used to question people, to prepare a report of investigation, and to present information in court. Sketches also are valuable sources of information for trial and defense counsels. Sketches are often introduced in court as evidence. They are used to acquaint the court with crime scenes and to help witnesses orient themselves as they testify.

Sketches complement notes and photographs made during a crime scene search. A sketch communicates information the way a photo does, but has the advantage of being able to have unneeded and distracting detail left out. Sketches concentrate attention on the most essential elements of the crime scene and their relationships. There are two kinds of crime-scene sketches: rough and smooth. A rough sketch is the kind you draw while at the crime scene. The purpose of a rough sketch is to portray information accurately, not necessarily artistically. You do not need to be artistic to draw a good rough sketch. A rough sketch is usually not drawn to scale. But it must show accurate distances, dimensions, and relative proportions. In order to eliminate excessive detail in a sketch, you may have to draw more than one. For example, one sketch may be devoted to the position of the victim's body and one or two of the more critical evidence items. Other sketches might show the lay of evidence items with respect to the point of entry or to other critical points. *Do not make changes in your sketches after you leave the scene.*

A smooth sketch is a more finished version of a rough sketch, using the information

provided in the rough sketch. A smooth sketch need not be drawn by the same person who draws the rough sketch. But whoever draws the rough sketch must verify the accuracy of the smooth sketch. In fact, it is best if a smooth sketch is made by an experienced draftsman. (The engineer officer may be able to provide a qualified person for this task.) The name of the person who drew the smooth sketch is shown in the report and on the sketch. A copy of the smooth sketch is attached to each copy of the investigation report. Smooth sketches are often drawn to scale from information in the rough sketch. By making a scaled drawing, the numbers showing distances can be left out. If the smooth sketch is not drawn to scale, these distances must be shown.

MAKING A ROUGH SKETCH

Any kind of paper may be used for a rough sketch. However, bond or graph paper is best. It can be placed on a clipboard large enough to form a smooth area for drawing. To prepare a rough sketch you need:

- A soft lead pencil.
- A 100-foot steel tape.
- A straightedge ruler.
- Several thumbtacks to hold one end of the steel tape down when you are working alone.
- A magnetic compass.

You may add as many items to this list of basics as you like.

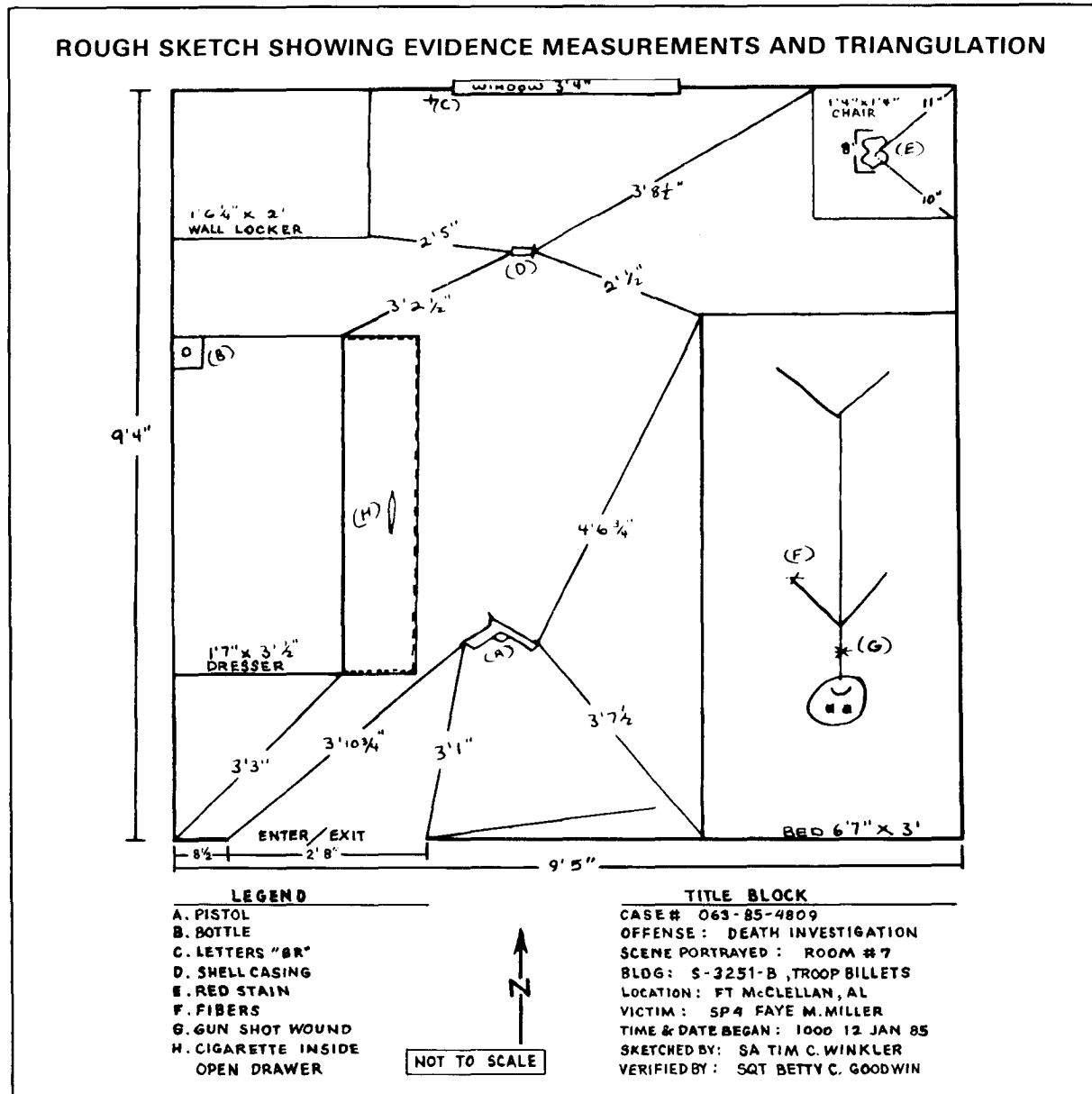
Several items of information are considered essential in a crime scene sketch. But do not restrict your sketch to these items alone. The major constraint on detail in

sketching is that the result must be completely intelligible to a viewer without a detailed study. If you include too much detail, the major advantage of a sketch over a photograph is lost.

Each sketch should include the critical features of the crime scene and the major, discernible items of physical evidence. Evidence sketches must show *accurate* measurements of the crime scene. They also show the location of evidence established by

use of the triangulation method. A photo sketch must show camera positions and distances to focus points.

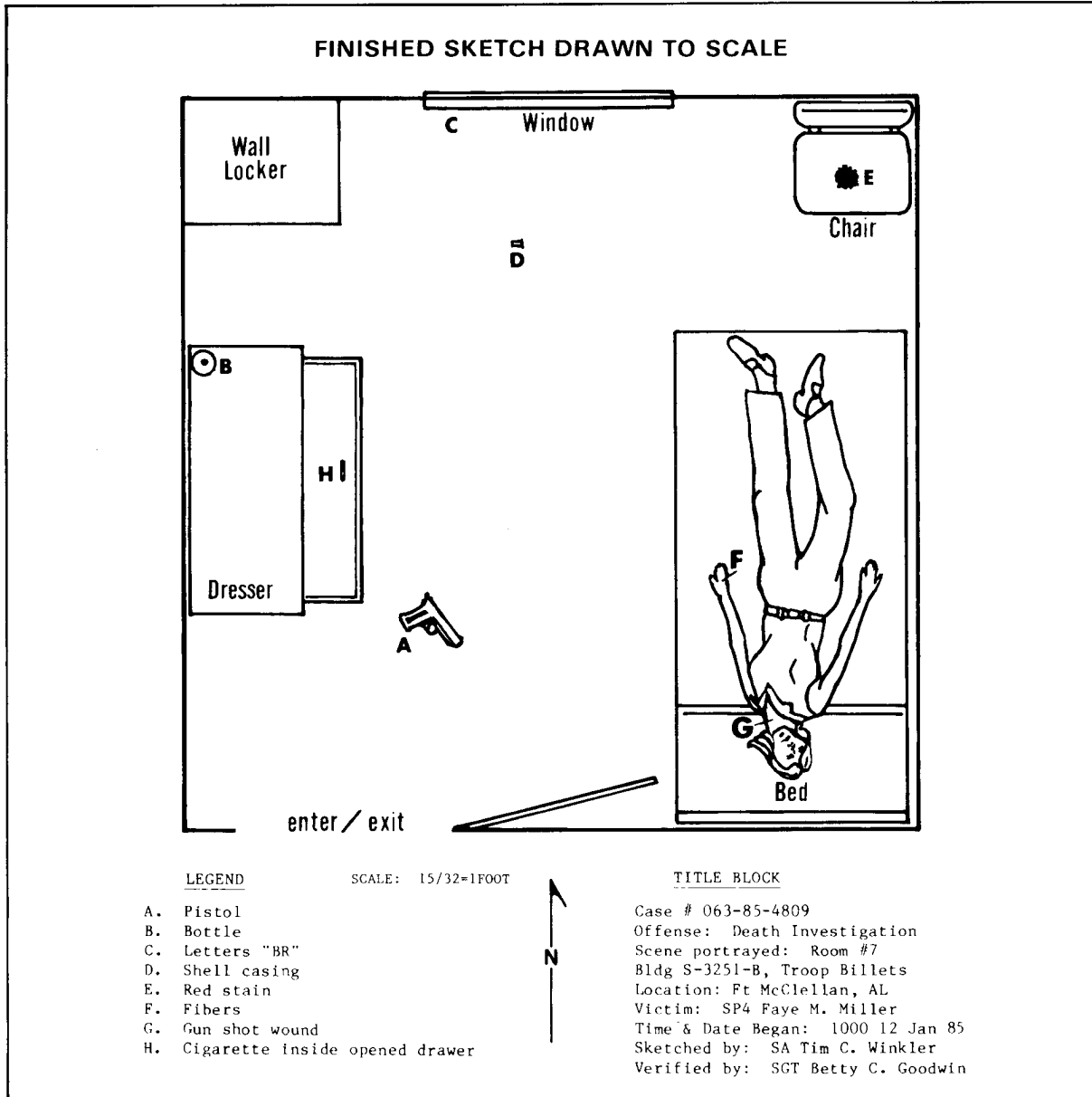
Each sketch should have a caption to identify the illustration. For instance, a caption might read: "Rough sketch showing camera positions and distances." Each sketch must have a legend. The legend explains the symbols, numbers, and letters used to identify objects on the sketch. Use standard military symbols where practical.



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Your sketch must also show the compass direction north. You will need to include a scale designation for scaled drawings only. If no scale is used, write "not drawn to scale." And each sketch must have a sketch title block containing the following entries:

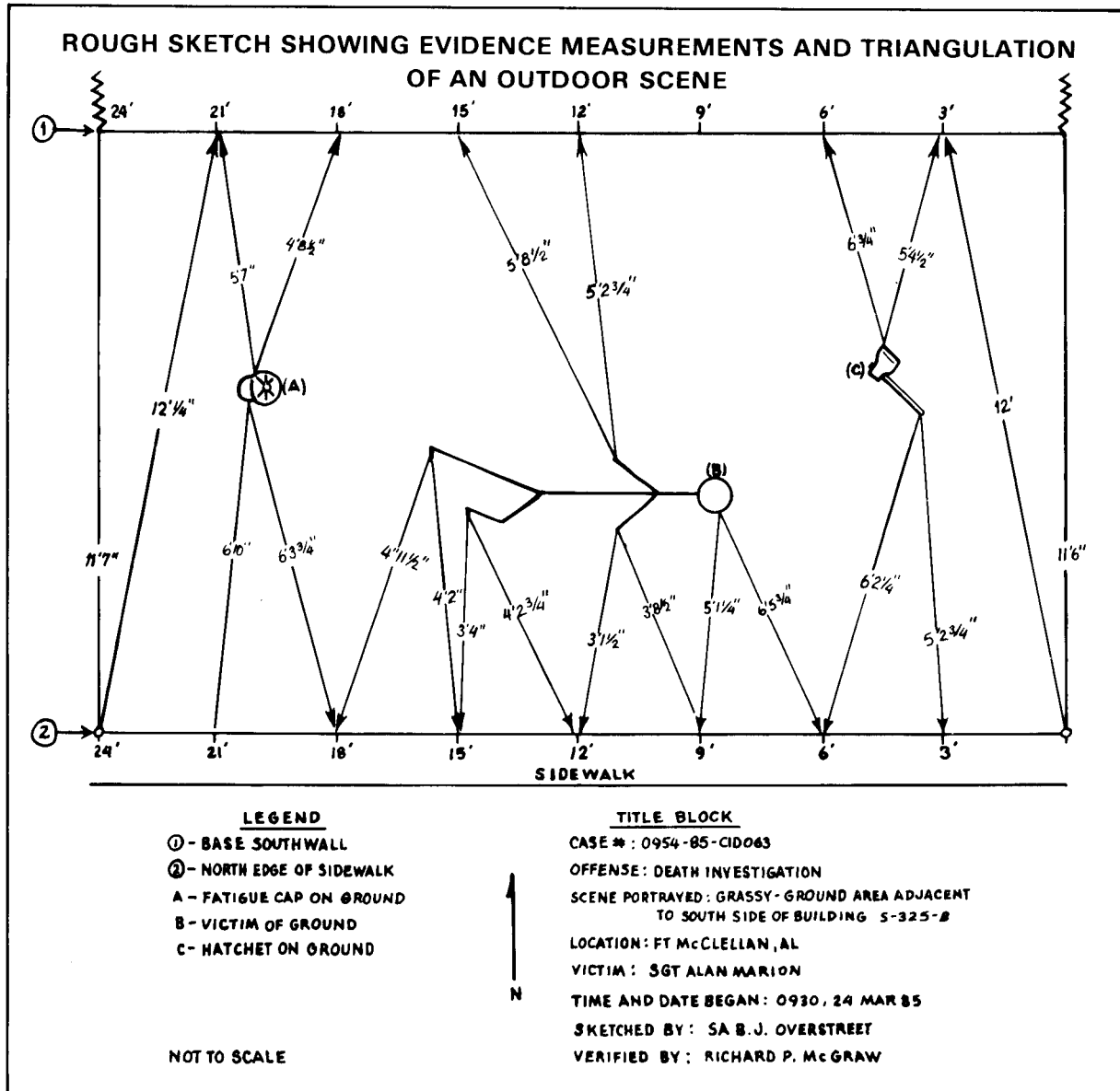
- Incident report number: MP Report, USACIDC sequence number, or Report of Investigation (ROI) number.
- Alleged offense.
- Name and rank or title of the victim.
- Scene portrayed—citing room number, building number, and type of building, (PX, commissary, house, troop billets).
- Location—citing complete name of installation, city, state, and zip code.
- Time and date sketch was started.
- Name and rank or title of person who drew the sketch.
- Name and rank or title of person who verified the sketch.



Measurements shown on the sketch must be as accurate as possible. Steel tapes are the best means of taking accurate measurements. A measurement error on a sketch can introduce doubt as to the competence of an entire crime scene search.

Measurements should be made and recorded uniformly. If one aspect of a sketch is accurate, such as the dimensions of a field in which a body was found, and the position of an object within the field is only roughly estimated, the distortion thus introduced

renders the sketch relatively useless. It is important that the coordinate distances of an item in the sketch be measured in the same manner. For example, one coordinate leg of the victim should not be paced and the other measured with a tape measure. It is also a mistake to pace off a distance and then show it on the sketch in terms of feet and inches. This implies a far greater degree of accuracy than the measurement technique could possibly produce. If the point arose in court, such imprecision could greatly detract from the value of the sketch.



LOCATING EVIDENCE ON SKETCHES

Various sketch methods may be used to locate evidence and other important items at the scene. The simplest form of a sketch is a two-dimensional presentation of a scene as viewed directly from above. Evidence is located on this type of sketch by triangulation. Triangulation is used for indoor and outdoor sketches having fixed reference points. Objects are located by creating a triangle of measurements from a single, specific, identifiable point on an object to two fixed points, all on the same plane, at the scene. If movable items are to be used as reference points, they must first be "fixed" themselves. Do not triangulate evidence to evidence. Do not triangulate under or through evidence. Do not take a line of measurement through space. Measure your line along a solid surface like a floor, wall, or table top. In the interest of clarity, keep the angle of triangulation measurements between 45 and 90 degrees on the sketches.

Regular shape items are fixed by creating two separate triangles of measurements. Each originates at opposite points on the object and ends at two fixed points, on the same plane, at the scene. This is commonly known as the 2-V method of triangulation.

Pliable objects are fixed by creating a single triangle of measurements from the center of mass of the object to two fixed points, on the same plane, at the scene. You also measure the longest and widest dimensions of the object.

Inhabited outdoor areas usually have easily defined, fixed reference points such as buildings, edges of roads, and sidewalks. When these are present, the triangulation method can be used to establish the location of objects. But uninhabited or remote areas may not have easily defined, fixed points within close range. In such cases, objects will have to be located by using the intersection-resection method taught in map reading. See FM 21-26 for a more complete discussion of intersection-resection method.

Cross-projection is used to add another dimension to sketches. The added dimension is useful when items or locations of interest are on or in wall surfaces in an enclosed space. The walls, windows, and doors in a cross-projection sketch are drawn as though the walls had been folded out flat on the floor. The required measurements and triangulation of evidence are then entered on the sketch. A cross-projection drawing may be used as a scaled drawing.

